

09/854,556
166539/00

REMARKS

Claims 1-21, all of the claims presently pending in the application, stand rejected on prior art grounds.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability.

Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Regarding the prior art rejection, claims 4-11 stand rejected under 35 U.S.C. §102(e) as anticipated by US Patent 6,385,636 to Suzuki et al. Claims 1-3 and 12-21 stand rejected under 35 U.S.C. §103(a) as unpatentable over Suzuki, further in view of US Patent 6,112,243 to Downs et al.

I. THE CLAIMED INVENTION

Applicant's invention, as disclosed and claimed in independent claim 1, is directed to a distributed processing method in which a processing task is distributed to a plurality of user terminals and is executed by a plurality of user terminals.

A server divides a processing task into a plurality of processing units and distributes the processing units to the plurality of user terminals. Each of the plurality of user terminals executes the distributed processing unit received from the server and sends back a processing result to the server via a network. The user terminals receive a specified service as a value for executing the processing units.

The present invention provides one method in which a contractor of a complicated computing task can control cost of capital investment and by which unused computer time on user terminals such as personal computers can be more effectively utilized by having the contractor's computing task executed in the background of a user terminal.

II. THE PRIOR ART REJECTIONS

The Examiner alleges that Suzuki anticipates the present invention as defined by claims 4-11 and, when modified by Downs, renders obvious the invention defined by claims

09/854,556
166539/00

1-3 and 12-21.

Applicant respectfully disagrees.

IIA. THE REJECTION BASED ON ANTICIPATION BY SUZUKI

The Examiner alleges that Suzuki anticipates claims 4-11. However, Applicant respectfully submits that there are limitations that are clearly neither taught or suggested by Suzuki.

Relative to claim 4, the evaluation currently of record fails to heed the plain meaning of the language of the claim. Although the Examiner is allowed to give a reasonably broad interpretation to claim language, that interpretation must be consistent with one that a person of ordinary skill in the art would agree to.

As explained below, neither Suzuki nor Downs teach or suggest that the server divide a processing task into a plurality of user tasks. The servers cited in both references send a signal and assign a task to one node. That is, neither of these references teach a “...server dividing said processing task into a form which can be distributed and executed in a plurality of user terminals...”

Moreover, Applicant submits that the terms “user application”, “license application”, and “license key” would be considered as terms of art. As such, all these terms, or reasonable equivalents must be found in Suzuki before the Examiner can reasonably consider that Suzuki anticipates claim 4.

Applicant submits that the description at lines 8-37 of column 2, lines 13-37 of column 3, and lines 10-34 of column 4 suggest, at most, a “user application”. However, there is no reasonable description of either a “license application” and “license key”, let alone a license key being provided by a license application.

Moreover, Applicant additionally submit that the term “user terminal” is also a term of art, and that the “client node” of Suzuki fails to satisfy this term, as one of ordinary skill in the art would understand both terms to mean. This feature is significant, since, as explained above, it enables the contractor to control the cost for capital investment, because the contractor does not need to own expensive computer equipment to compute the requested processing task.

A key exemplary feature of the present invention is a “...a server dividing a

09/854,556
166539/00

processing task into a plurality of processing units and distributing the processing units to said plurality of user terminals...”, as recited in claim 1. This feature enables the contractor to control the cost for capital investment, because the contractor does not need to own expensive computer equipment to compute the requested processing task.

Applicant submits that Suzuki discloses a distributed processing system providing one or more server nodes 12 and m client nodes 14a-1, ... 14a-m connected through a network, as shown in Figure 1 and described at lines 20-25 of column 1. Upon receiving the task request signal, the server node acquires a CPU load ratio from the operating system and performs the requested task when CPU load ratio is lower than a preset value, as shown in Figure 5 and discussed in the Abstract and at lines 13-19 of column 9. Conversely, when the CPU load ratio is higher than the preset value, the server node sends a response signal to the effect that the client node is to execute the requested task (Figure 5, Abstract, and column 10, at lines 1-6).

Downs discloses a computer system interconnected in a network 10. The network 10 includes a resource requester 12, a resource allocator 14, and a plurality of resource providers 16 interconnected in the network (Figure 1, column 3 at lines 10-14). As explained at lines 19-21 of column 3, the resource requester 12 is simply a client that needs computing or processing resources for a task. As explained at lines 23-25 of column 3, the resource allocator 14 is simply a server that assigns a particular task to one of a plurality of resource providers 16. The resource providers 16 are simply computer systems with resources (e.g., processing power) that the resource provider 16 is willing to sell to clients, such as the resource allocator 14 and the resource requester 12 (column 3, lines 23-28).

Neither of these two references discloses nor suggests a server dividing a processing task into a plurality of user tasks. Suzuki discloses a server node that sends a response signal to one client node when the CPU load ratio is higher than the preset value. Downs discloses a resource allocator that assigns a particular task to one of the plurality of resource providers 16. That is, the servers cited in both references send a signal/assign a task to one node.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of: “... a user terminal obtaining a user application and a license application from an application server via a network ... said collection/distribution server dividing said processing task into a form which can be distributed and executed in a plurality of user

09/854,556
166539/00

terminals ... said license application executing the divided processing task requested from said collection/distribution server by said license application on said user terminal, and sending back a processing result to said collection/distribution server from said user terminal ... said license application providing the user terminal with a license key for said user application installed to said user terminal ...”, as required by claim 4. Claim 8 has similar language.

Relative to claim 5, Applicant submits that there is no suggestion in Suzuki that even the “user application” operates in the background, let alone that a license application operate in the background.

Hence, turning to the clear language of the claims, in Suzuki there is no teaching or suggestion of: “... said license application runs as a background processing on said user terminal”, as required by claim 5.

Relative to claims 6 and 7, Applicant submits that Suzuki fails to reasonably suggest using a license application, let alone the plain meaning of the claim language in which the license application execute the processing task, or a maintaining of “points” , or the user terminal being provided with a “service” in compensation for having executed the task.

Hence, turning to the clear language of the claims, in Suzuki there is no teaching or suggestion of: “... to obtain a license application ... said license application executing the processing task ... said collection/distribution server calculating and storing points in accordance with a processing amount for the processing task of each of said user terminals; and said application server providing said user terminal with a service”, as required by claim 6 and claim 7.

Therefore, Applicant submits that claims 4-8 are clearly not anticipated by Suzuki and that claims 9-11 would be allowable, even if only by reason of dependence.

II.B. THE REJECTION BASED ON OBVIOUSNESS BY SUZUKI, FURTHER IN VIEW OF DOWNS

The Examiner concedes that Suzuki fails to reasonably teach or suggest “... user terminals receiving a specified service as a value for executing the processing units” and relies upon Downs to satisfy this deficiency.

The Examiner alleges that one of ordinary skill in the art would have been motivated

09/854,556
166539/00

to modify Suzuki to "... include Downs concept of user terminals receiving a specified service as a value for executing the processing units because this would have ensured that [th]e user terminal is compensated for service rendered".

However, as mentioned above, a key exemplary feature of the present invention is a "... a server dividing a processing task into a plurality of processing units and distributing the processing units to said plurality of user terminals...", as recited in claim 1. This feature enables the contractor to control the cost for capital investment, because the contractor does not need to own expensive computer equipment to compute the requested processing task.

Applicant submits that Suzuki discloses a distributed processing system providing one or more server nodes 12 and m client nodes 14a-1, ... 14a-m connected through a network, as shown in Figure 1 and described at lines 20-25 of column 1. Upon receiving the task request signal, the server node acquires a CPU load ratio from the operating system and performs the requested task when CPU load ratio is lower than a preset value, as shown in Figure 5 and discussed in the Abstract and at lines 13-19 of column 9. Conversely, when the CPU load ratio is higher than the preset value, the server node sends a response signal to the effect that the client node is to execute the requested task (Figure 5, Abstract, and column 10, at lines 1-6).

Downs discloses a computer system interconnected in a network 10. The network 10 includes a resource requester 12, a resource allocator 14, and a plurality of resource providers 16 interconnected in the network (Figure 1, column 3 at lines 10-14). As explained at lines 19-21 of column 3, the resource requester 12 is simply a client that needs computing or processing resources for a task. As explained at lines 23-25 of column 3, the resource allocator 14 is simply a server that assigns a particular task to one of a plurality of resource providers 16. The resource providers 16 are simply computer systems with resources (e.g., processing power) that the resource provider 16 is willing to sell to clients, such as the resource allocator 14 and the resource requester 12 (column 3, lines 23-28).

Neither of these two references discloses nor suggests a server dividing a processing task into a plurality of user tasks. Suzuki discloses a server node that sends a response signal to one client node when the CPU load ratio is higher than the preset value. Downs discloses a resource allocator that assigns a particular task to one of the plurality of resource providers 16. That is, the servers cited in both references send a signal/assign a task to one node.

09/854,556
166539/00

Further, Applicant respectfully traverses that the Examiner has met the initial burden of *prima facie* rejection. First, it is submitted that, as clearly described at lines 42-46 of column 4, at most, Downs teaches:

“ The accounting unit 44 includes software code to bill the resource requesters 12 for services rendered and to pay the resource provider 16 for services provided. The accounting unit 44 manages the payments and bills and performs a metering function for the resource allocation program 28.”

Applicant submits that this simple accounting module 44 fails to suggest anything except a normal accounting process in which a company is billed and the entities providing the computing resource are paid. This simple billing/payment concept falls short of a “specified service” received by a “user terminal”, or any of the other descriptions of specialized compensation forms clearly described in the claims. That is, there is no suggestion in Downs that the payment is anything except, for example, a monthly payment. The Examiner is required to give the plain meaning to claim language, as would be understood by one of ordinary skill in the art.

Therefore, even if Suzuki were to be modified to incorporate an “accounting module”, Applicant submits that the combination would not result in the plain meaning of the description of the claims.

Moreover, as previously pointed out, the “client nodes” of Suzuki are not “user terminals”. That is, the “server node”/ “client node” relationship in Suzuki is not in any sense a relationship in which “client nodes” are expecting some type of compensation. Applicant submits that the Examiner is not entitled to take the concept “client node” out of context as understood by one of ordinary skill in the art, thereby mysteriously extrapolating that the “client node” somehow expects compensation.

Nor, as explained above, does either Suzuki or Downs reasonably teach or suggest a server that divides a task to be distributed to a plurality of user terminals.

Because of these deficiencies, Applicant submits that the rejection currently of record fails to provide a reasonably proper motivation to modify Suzuki, let alone overcome the above-identified deficiencies of Suzuki.

Therefore, Applicant also submits that claims 1-3 and 12-21 are also clearly patentable over Suzuki.

09/854,556
166539/00

For the reasons stated above, the claimed invention is fully patentable over the cited references.

Further, the other prior art of record has been reviewed, but it too, even in combination with Suzuki or Downs, fails to teach or suggest the claimed invention.

III. FORMAL MATTERS AND CONCLUSION

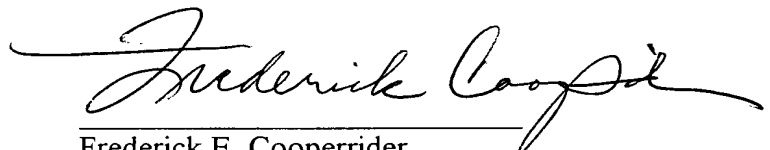
In view of the foregoing, Applicant submits that claims 1-21 all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 7/30/04


Frederick E. Cooperrider
Reg. No. 36,769

McGinn & Gibb, PLLC
Intellectual Property Law
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254